

PRESERVATION ASSESSMENT AND MAPPING OF THE REESE FAMILY BURYING GROUND, RICHLAND COUNTY, SC



Chicora Research Contribution 544

**PRESERVATION ASSESSMENT AND MAPPING
OF THE
REESE FAMILY BURYING GROUND,
RICHLAND COUNTY, SC**

Prepared By:
Michael Trinkley, Ph.D.
Debi Hacker
Nicole Southerland

Prepared For:
Clarence W. Hill, Ph.D.
And
Rev. J.P. Neal, Jr.
The Council of Village Elders
6640 Cabin Creek Rd.
Hopkins, SC 29201

This project is funded in part by the Richland County Conservation Commission

CHICORA RESEARCH CONTRIBUTION 544



Chicora Foundation, Inc.
PO Box 8664
Columbia, SC 29202
803-787-6910
www.chicora.org

February 22, 2012

© 2012 by Chicora Foundation, Inc., Richland County, and the Council of Village Elders. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, transmitted, or transcribed in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise without prior permission of Chicora Foundation, Inc. except for brief quotations used in reviews. Full credit must be given to the authors, publisher, and project sponsor.

MANAGEMENT SUMMARY

This study examines what we have identified as the antebellum Reese Family Burying Ground. The cemetery is situated about 1,150 feet southwest of the intersection of Cabin Creek and Neal roads in the vicinity of Hopkins, South Carolina. The assessment, grave identification, and mapping was provided for the current property owner, Rev. J.P. Neal, Jr. and the work was graciously funded by a grant from the Richland County Conservation Commission.

The study did not include any detailed historical research, which we understand is being independently pursued. We do not have a chain of title for the property or other critical documentation, but we have been able to identify at least a few details regarding the Reese family and their property just prior to the Civil War. By all accounts the family was of modest means, perhaps accounting for only one of the twenty graves at the cemetery being marked. Additional historical research is needed to determine if the cemetery continued to be used by the Reese family after the Civil War. Aerial photographs reveal that the cemetery, as well as the surrounding area, has been heavily wooded at least since the late 1930s.

Twenty graves have been identified forming three imperfect rows. Only one of the graves is marked, documenting the grave of Mary H. Reese, who died in 1858.

A unique feature of the cemetery is that it is surrounded by a ditch and dike. Similar features have been identified at Charleston and Beaufort antebellum cemeteries. The earthworks are commonly interpreted as being designed to prevent flooding and/or keep livestock out of the cemetery.

Prior to the assessment we visited the cemetery and recommended removal of undergrowth, vines, and small trees. Much of this was accomplished prior to our visit. This opened

the cemetery, facilitating grave identification and mapping. There has been no maintenance efforts prior to this work and the assessment recommends steps to establish a minimal level of on-going maintenance. This includes removal of additional vegetation, mulching the vegetation and adding it to the cemetery in order to discourage second growth, stabilizing the surrounding earthwork, and repairing the broken stone.

Now that the cemetery has been mapped, it would be appropriate to fill in the grave depressions, making the cemetery safer for visitors. Consideration should be given to marking the various graves; it may be useful to contact descendants of the Reese family to request their participation in this effort.

TABLE OF CONTENTS

List of Figures		iv
List of Tables		iv
Introduction		1
<i>The Project</i>	1	
<i>Preservation Fundamentals</i>	2	
<i>The Cemetery, Its Setting and Context</i>	4	
<i>Factors Affecting Landscape Character</i>	6	
Historic Synopsis		9
<i>Lower Richland</i>	9	
<i>The Cemetery</i>	13	
<i>Future Research</i>	16	
Preservation Assessment		17
<i>Road and Access Issues</i>	17	
<i>Security Issues</i>	19	
<i>Landscape Maintenance</i>	19	
<i>Other Maintenance</i>	23	
<i>Conservation</i>	24	
<i>Recommendations and Priorities</i>	25	
Grave Identification and Mapping		27
<i>Methods</i>	27	
<i>Results</i>	29	
Conclusions		31
<i>History</i>	31	
<i>The Cemetery</i>	31	
<i>Preservation Assessment</i>	32	
<i>National Register Eligibility</i>	32	
Sources Cited		33

LIST OF FIGURES

Figure

1. Vicinity of the Reese Family Burying Grounds in Richland County, SC	1
2. Topographic map showing the cemetery	2
3. Topography of the cemetery area	5
4. View of the cemetery looking northwest	6
5. Palmer Drought Index for South Carolina	6
6. Plant Hardiness Zones for Richland County	7
7. Mills' <i>Atlas</i>	9
8. Portion of the 1897 Map of Richland Co., South Carolina	11
9. Portion of the 1929 <i>New Map of Richland County</i>	11
10. Comparison of the 1943 Hopkins 15' topographic map with the current 1987 7.5' topographic map	12
11. Comparison of 1939 and 1959 aerials	13
12. Reese family tree	15
13. Trail map for the Cabin Creek Preserve	18
14. Tree issues in the cemetery	22
15. View of the ditch and dike	20
16. Broken stone for Mary H. Reese	25
17. Sunken graves	28
18. Map of the Reese Family Burying Grounds	30

LIST OF TABLES

Table

1. Secretary of the Interior's Standards for Preservation	3
---	---

Introduction

The Project

In early January 2011 Ms. Deborah Scott Brooks with The Council of Village Elders requested a plan for the mapping and development of preservation recommendations for a cemetery located off Cabin Creek Road in the Hopkins area of lower Richland County. The cemetery was thought to possibly be associated with the early nineteenth century Minerva Academy. A plan and budget was prepared and the package was submitted to the Richland County Conservation Commission for a possible grant. By mid-November 2011 we were contacted by Ms. Brooks notifying us that Richland County had awarded The Council of Village Elders a grant for the work.

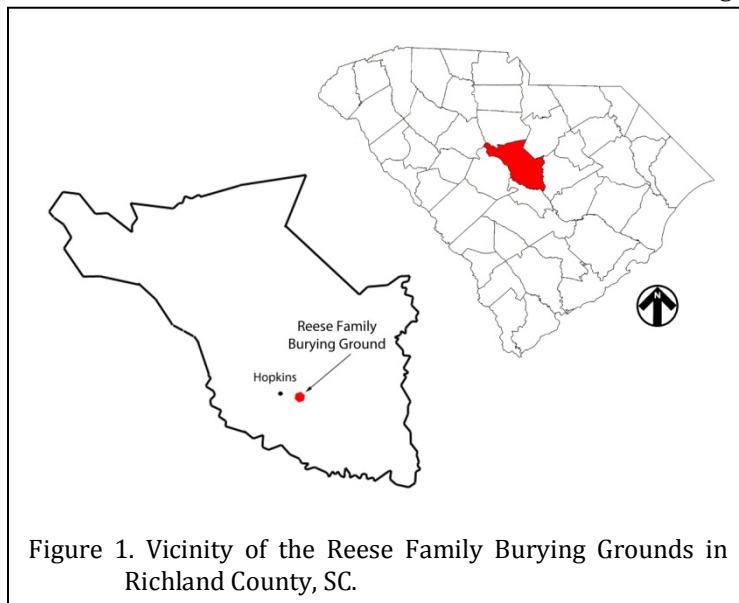


Figure 1. Vicinity of the Reese Family Burying Grounds in Richland County, SC.

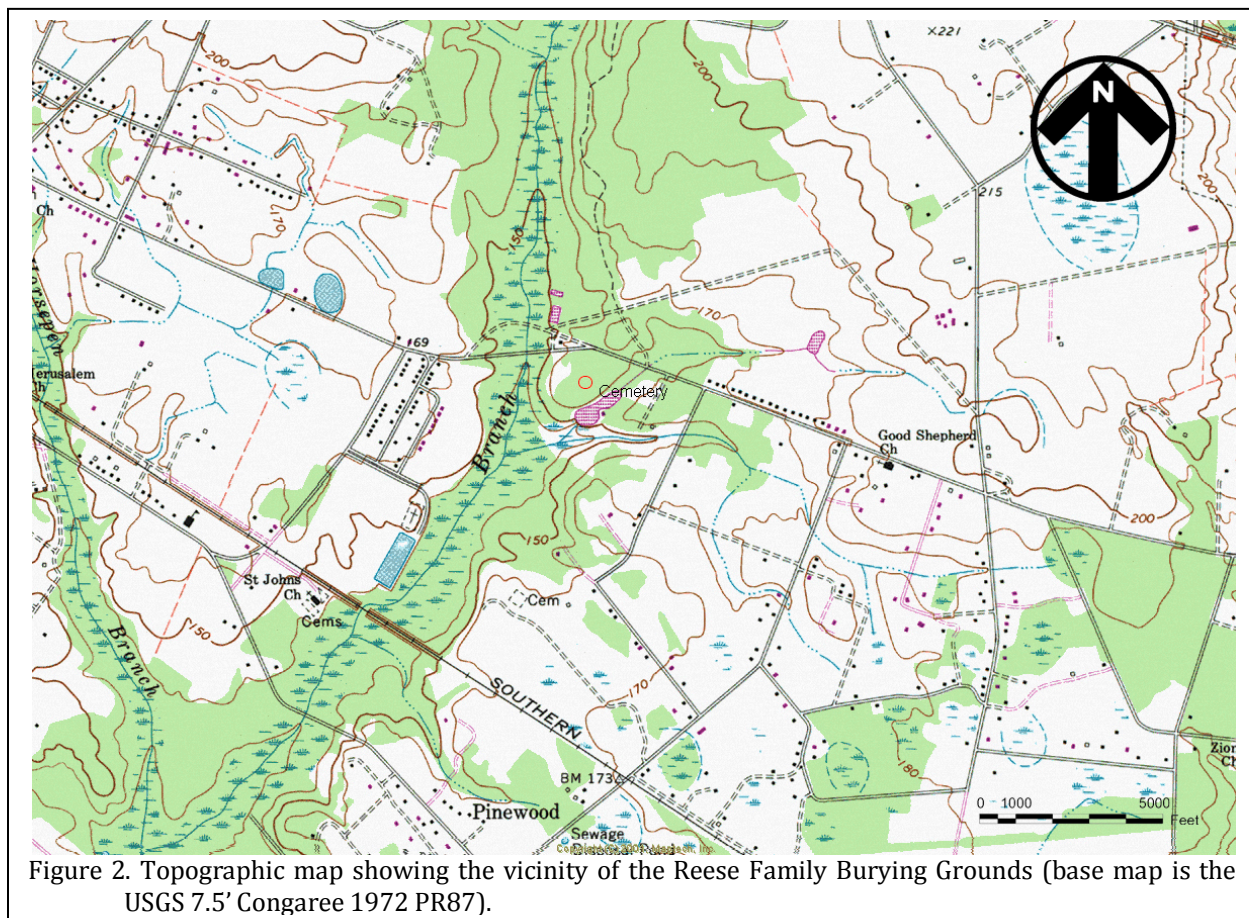
An on-site meeting was scheduled for December 28, 2011 and was attended by Dr. Clarence W. Hill and Rev. J.P. Neal, Jr. representing The Council of Village Elders; Ms. Nancy

Stone-Collum with the Richland County Conservation Commission; and Dr. Michael Trinkley with Chicora. The cemetery was briefly examined and some initial recommendations were provided to remove vegetation and allow better access for mapping and assessment.

By mid-February we were informed that the initial clearing was complete and we scheduled the on-site work for February 23, 2012. The work was conducted by Debi Hacker, Nicole Southerland, and Michael Trinkley. Chicora's involvement in the project was limited to the identification of graves, mapping of the cemetery, and development of long-term preservation recommendations. Historic research was being conducted by another party and was not a task assigned to Chicora. We have, however, provided historical information that we identified as we explored other aspects of the project.

The Cabin Creek Road cemetery, as it was initially known, is found on the property of Rev. J.P. Neal, Jr. This property is known as the Cabin Creek Preserve, a 57.6 acre tract Ecological Science Education Center and Heritage Preserve in the Hopkins area.

Hopkins is an unincorporated community in Richland County that was founded about 1836 and was named for John Hopkins, a Virginian who obtained a royal land grant for lands here in 1764. It was originally known as Hopkins Turnout since the railroad had a turn table here prior to the line being completed to Columbia. Trains ran from Charleston to Hopkins where passengers would disembark and take a stagecoach the remaining 11 miles to downtown Columbia.



When initially discovered on the Cabin Creek Preserve Property, the cemetery was thought to perhaps relate to Minerva Academy, a locally important school created in 1802 that gave rise to the Minervaville community, identified on Mills' *Atlas* of 1826. As the community declined, the academy closed in 1834. Research, however, reveals that the cemetery is not associated with the school, but rather is a plantation cemetery for the Reese family, a middling status family largely surrounded by much larger – and much wealthier – cotton planters in lower Richland.

We recommend the cemetery eligible for inclusion on the National Register of Historic Places since it represents a type of planter cemetery that is rarely documented, contains a unique ditch and dike surrounding the graves, and is well preserved.

This project focused on identifying the graves in the cemetery, mapping the cemetery and identified graves, documenting the cemetery, and preparing long-term preservation recommendations for the cemetery.

Preservation Fundamentals

Preservation is not an especially difficult concept to grasp, although the key principles are not always clearly articulated. The fundamental concepts are well presented in the Secretary of the Interior's Standards for Preservation (see Table 1).

This document reminds us – at least at a general level – of what caregivers need to be thinking about as they begin a cemetery preservation plan. Those responsible for the care of the Reese Family Burying Ground should be intimately familiar with the eight critical issues it

outlines.

For example, all other factors being equal, a cemetery should be used as a cemetery – not to walk dogs, not as a playground, and not as a park. And until the caregivers are able to do what needs to be done, it is their responsibility to make certain that the site is preserved – it must not be allowed to suffer damage under their watch.

Caregivers must work diligently to understand – and retain – the historic character of the cemetery. In other words, they must look at the cemetery with a new vision and ask themselves, “what gives this cemetery its unique, historical character?” Perhaps it is the landscape, the old and stately trees, the large boxwoods, or the magnificent arborvitae. Perhaps it is the very large proportion of complex monuments, or the exceptional slate markers. It may simply be that it is a unique representation of a cemetery type rarely seen in a rapidly developing urban setting. Whatever it is, those undertaking its care and preservation become the guardians responsible for making certain those elements are protected and enhanced (whether they are particularly appealing to the caregivers or not).

Whatever conservation (i.e., treatment or repair) efforts are necessary must be done to the highest professional standards; these conservation efforts must be physically and visually compatible with the original materials; these conservation efforts must not seek to mislead the public into thinking that repairs are

Table 1.
Secretary of the Interior’s Standards for Preservation

1. A property will be used as it was historically, or be given a new use that maximizes the retention of distinctive materials, features, spaces, and spatial relationships. Where a treatment and use have not been identified, a property will be protected and, if necessary, stabilized until additional work may be undertaken.
2. The historic character of a property will be retained and preserved. The replacement of intact or repairable historic materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Work needed to stabilize, consolidate, and conserve existing historic materials and features will be physically and visually compatible, identifiable upon close inspection, and properly documented for future research.
4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. The existing condition of historic features will be evaluated to determine the appropriate level of intervention needed. Where the severity of deterioration requires repair or limited replacement of a distinctive feature, the new material will match the old in composition, design, color, and texture.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.

original work; and the conservation efforts must be documented for future generations. If the caregivers aren’t conservators, it is their responsibility as the stewards of the property to retain a conservator appropriately trained and subscribing to the Code of Ethics and Standards of Practice of the American Institute for Conservation (AIC).

The Secretary of the Interior reminds those responsible for the resources that each and every cemetery has evolved and represents different styles and forms. It is the responsibility of care-givers to care for all of these modifications and not seek to create a “Disney-land” version of the cemetery, tearing out features that don’t fit into their concept of what the cemetery “ought” to

look like.

Likewise, caregivers are reminded that there will be designs, monuments, and other features that characterize the cemetery – and the caregivers are responsible for identifying these items and ensuring their preservation. Caregivers must be circumspect in any modifications, ensuring that they are not destroying what they seek to protect.

Before acting, those responsible for preservation are required as good and careful stewards to explore and evaluate the property, determining exactly what level of intervention – what level of conservation – what level of tree pruning – is actually necessary. And where it is necessary to introduce new materials – perhaps a pathway – into the cemetery, they must do their best to make certain these new elements are not only absolutely necessary, but also match the old elements in composition, design, color, and texture. In other words, if the cemetery has brick pathways, they would be failing as good stewards if they allowed concrete pathways – especially if the only justification was because concrete was less expensive.

Where conservation treatments are necessary, the Secretary of the Interior tells stewards that they must be the gentlest possible. However phrased – less is more – think smart, not strong – caregivers have an obligation to make certain that no harm comes to the resource while under their care. And again, one of the easiest ways to comply is to make certain that caregivers retain a conservator subscribing to the ethics and standards of the American Institute for Conservation.

Finally, the caregivers must also recognize that the cemetery is not just a collection of monuments and the associated landscape – the cemetery is also an archaeological resource. They must be constantly thinking about how their efforts – whether to repair a monument, put in a parking lot, or resurface a path – will affect the archaeological resources – archaeological resources that are the remains of people buried at the cemetery by their loved ones.

These are especially critical issues for the Reese Family Burying Grounds. The property is intended to be used as an educational facility and this will result in a dramatic increase in the number of visitors, increasing pressures on the cemetery. The only marked grave has had its stone broken. Intervention is needed to ensure the long-term preservation of this cemetery and to make certain the historic integrity is maintained.

Our first recommendation, therefore, is that those assuming care for the cemetery become thoroughly familiar with the Secretary of the Interior's Standards for Preservation and reaffirm their responsibility as stewards of this historical resource to ensure that future preservation efforts are consistent with sound preservation principles and practices. These standards must become "talking-points" for all future discussions and decisions made concerning the cemetery.

The Cemetery, Its Setting and Context

The cemetery is found within Richland County Census Tract 118 and access to the cemetery is off Cabin Creek Road (S-66). This is a predominately rural area located in a General Use District and zoned Rural Use. There are two wireless facilities within 2 miles of the cemetery. One is situated about 1.1 miles to the south; the other is about 1.6 miles to the northwest. Neither is visible from the cemetery.

The topography on the tract slopes south-southwest from Cabin Creek Road, dropping from about 169 feet above mean sea level (AMSL) to about 166 feet AMSL in the vicinity of the cemetery, about 350 feet south of the road. The topography continues to slope to the west, toward Cabin Creek and to the south, toward a small tributary that has been dammed to create a pond (Figure 3).

The cemetery and much of the surrounding high ground is classified as Pelion loamy sand, 2-6% slopes. This is a moderately well drained soil found on marine terraces and uplands in the upper coastal plains and sand hills.

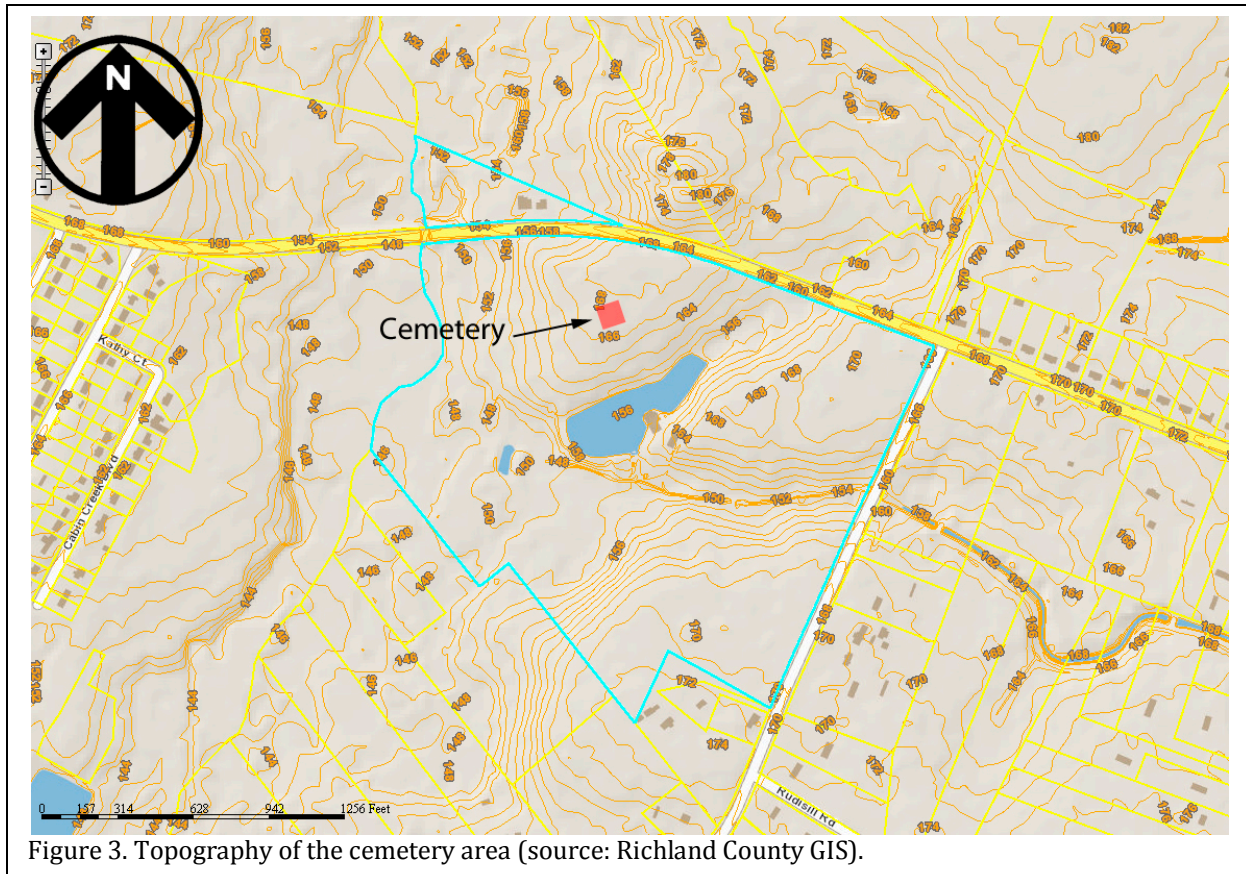


Figure 3. Topography of the cemetery area (source: Richland County GIS).

A typical profile reveals an A horizon of grayish brown (10YR 5/2) loamy sand about 0.4 foot in depth resting on an E horizon of pale brown (10YR 6/3) loamy sand to a depth of about 0.8 foot. The Bt horizon extends to a depth of about 1.8 foot and consists of reddish yellow (7.5YR 6/6) sandy clay loam. The Btx horizon consists of yellow (10YR 7/6) sandy clay to a depth of about 3.3 feet, although it grades into a BC horizon of nearly identical soil that continues to a depth of about 5.4 feet. All of the soils are acidic.

While the clays and acidity are not generally conducive to the preservation of human remains, burials were recently recovered from Lexington County under very similar conditions (Trinkley et al. 2011).

Richland County is about evenly split between whites and African Americans. In contrast, census tract 118, which comprises the area of the cemetery, is overwhelmingly African

American (about 86%).

Housing is primarily owner occupied (87%) and the rental vacancy rate is about 19%. There are about 141,600 households in the County and 2,300 in the Hopkins census tract. Just over a third of the population has attained a high school education; only 6% have a college education.

Although the Hopkins area is rural, Richland County as a whole is relatively urban. The number of farms has declined by 15% from 2002 to 2007, with just under 59,000 acres in farms county-wide. The average size of a farm in the County is 162 acres, which is actually a 9% increase over the 2002 size, indicating some amalgamation of farm lands. Most of this farm land is used to grow either corn or soybeans. While nursery stock accounts for only 235 acres, it ranks second in terms of crop value.

Median household income is \$31,728 and



Figure 4. View of the cemetery looking northwest.

the per capita income is \$14,141. Both are substantially below the corresponding averages for Richland County of \$47,922 and \$25,808. The unemployment rate in the county is currently 8.3% and about 13.5% of the individuals in the Hopkins area live below the poverty line.

Access to the cemetery is by way of a gravel and dirt road leading to the Cabin Creek Preserve off Cabin Creek Road (S-66). This road parallels SC 769 for about 6 miles before tying into SC 769 south of Congaree. It is likely that the road sees primarily local traffic (there are a number of smaller roads branching off Cabin Creek Road). The annual average daily traffic count (AADT) for Cabin Creek Road is 1,600 vehicles. For comparison, Lower Richland Blvd. has an AADT of 2,200 and Garners Ferry has an AADT of 15,400 (Central Midlands Council of Governments 2002).

This access point is blocked by a locked gate, although the property is not fenced and it would be possible to walk in off Cabin Creek Road to the cemetery.

The cemetery is situated in an

area of dense woods. Much of the surrounding area has been logged in the last 20-30 years and today consists of young pines. The cemetery area includes pine and oak hardwoods.

Factors Affecting Landscape Character

While Richland County spans the upper coastal plain and piedmont, with the fall line cutting through the middle

of the County, the Reese Family Burying Ground is situated in lower half of the County, in the area of the upper coastal plain characterized by gentle slopes. Elevations in this area range from about 80 feet AMSL at the confluence of the Congaree and Wateree rivers to about 200 feet AMSL in the vicinity of Lykes.

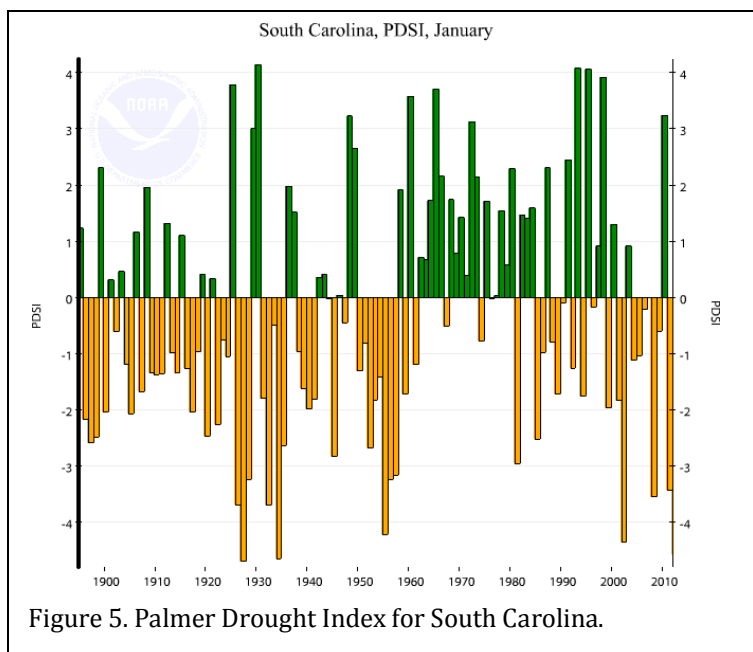


Figure 5. Palmer Drought Index for South Carolina.

In winter, the average temperature is 48°F and the average daily minimum temperature is 38°F. In summer, the average temperature is 80°F and the average daily maximum temperature is 91°F. Summers are also marked by relatively high humidity levels.

The average yearly precipitation is about 46 inches, with about 27 inches occurring in the growing season from April through October. As illustrated by Figure 5, South Carolina has been in a period of drought for the past several years, which broke briefly in 2010, but is again dominant.

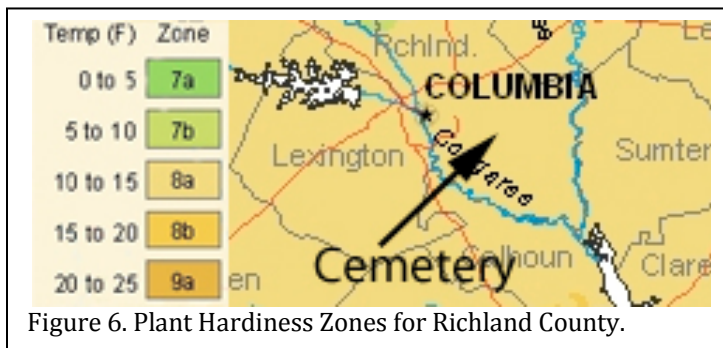


Figure 6. Plant Hardiness Zones for Richland County.

The average growing season for Richland County is 225 days. Figure 6 shows that the cemetery is situated in Plant Hardiness Zone 8a, where the minimum temperatures are expected to be between 10 and 15°F.

The cemetery is situated outside the 1% annual chance flood (the 100-year flood) that would inundate the Cabin Branch floodplain and extend eastward into a small branch to the south of the property (FEMA Flood Map 45079C0415K). This – in conjunction with the elevations and topographic setting – suggests that the ditch and dike system were not constructed with control of flooding as their primary purpose. It is more likely that they were designed to limit livestock from roaming across the burial ground.

The EPA identifies no hazardous chemical or waste generators within a mile of the cemetery. The Lower Richland School Bus Shop, identified as contaminated land and a hazardous waste generator, is just beyond a mile from the cemetery.

INTRODUCTION

Historic Synopsis

As previously noted, Chicora was not tasked with the compilation of any historic research on the cemetery. We have, however, made some recommendations regarding information that would be of assistance in developing a preservation program for the cemetery, such as developing a chain of title for the property.

The information we provide here was identified during the course of our work and may assist in placing the burial ground in a better

historic context until such time as the more detailed research is completed.

Lower Richland

One of the earliest maps of the Richland County area is Mills' *Atlas* of 1826. Cedar Creek is clearly indicated, as is the nearby community of Minervaville. Cabin Branch is not shown. Planters indicated on the map include various Adams, Howells, Weston, and Tucker. Placement of the cemetery is difficult since roads have changed

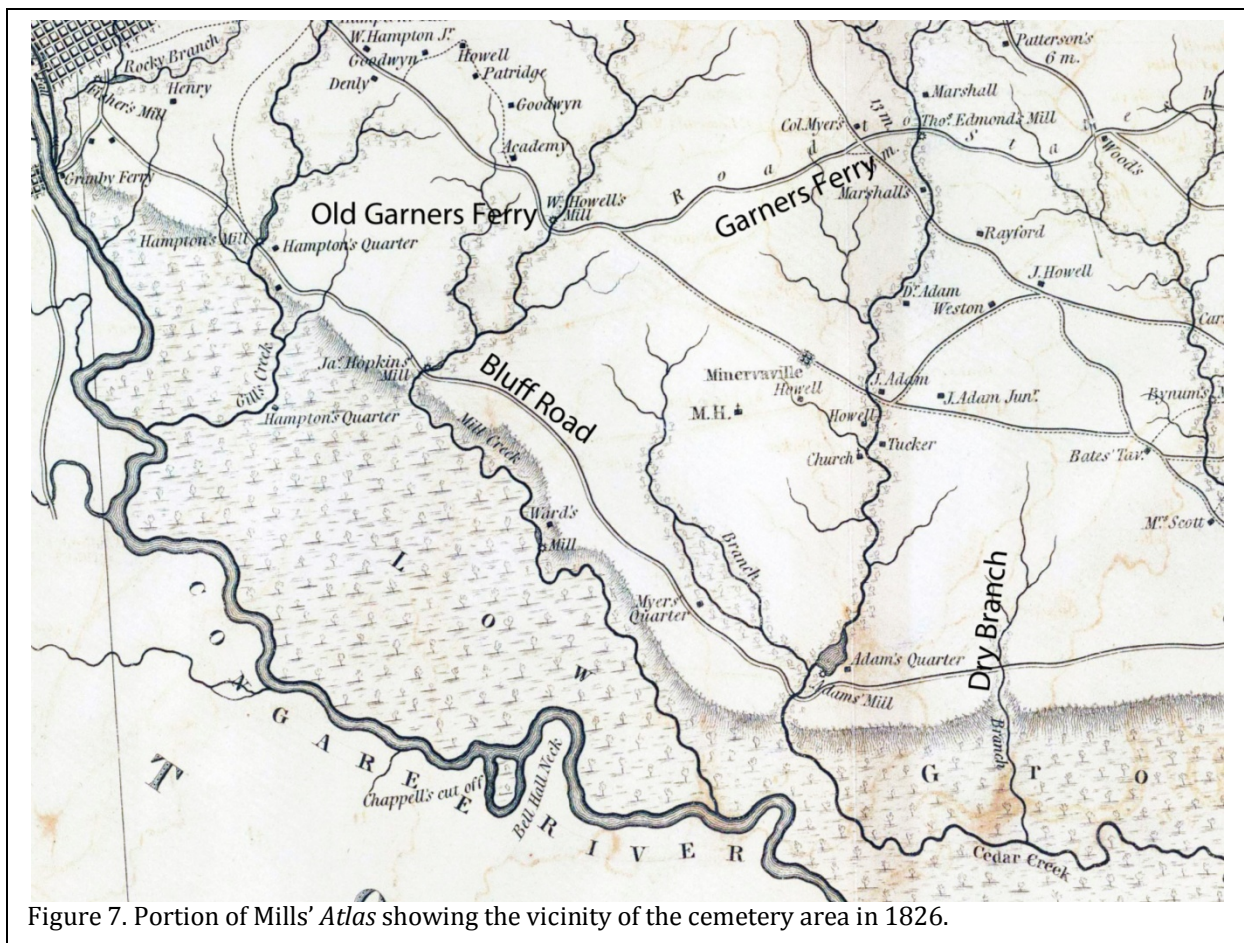


Figure 7. Portion of Mills' *Atlas* showing the vicinity of the cemetery area in 1826.

dramatically over the past 186 years. Modern day Hopkins is in the vicinity of the meeting house shown by Mills. Moore suggests that the church on the west bank of Cedar Creek may have been Beulah Baptist, an offshoot of Congaree Baptist organized in 1806 (Moore 1993:85; see also <http://digital.tcl.sc.edu/cdm/compoundobject/col/lection/hrs/id/1423/rec/32>). Nearby is the community of Minervaville. Mills comments that, "Minervaville has been long the seat of an academy; and is resorted to in summer by the planters near the swamps for health" (Mills 1826:710).

Little is known about this village (or its academy), including its location since no archaeological studies have ever been conducted. Green briefly mentions that,

By Act of December 18, 1802, Malachi Howell and others were incorporated as "The Minerva Society." They proceeded to erect a building for an academy, which was located, it seems, a short distance below the station of Hopkins, where some of the foundation stones of the old building are still to be seen. Here a village, Minervaville, grew up, which became the station of Minervaville when the South Carolina Railway came to Columbia. Hopkins' Turnout took its place in the course of time, a name to be later changed to Hopkins. It remains in memory as a "wicked little town" (Green 1932:133).

Hopkins claims that the school building was built "about a mile or so from John's [Hopkins, 1765-1832] home, 'Cabin Branch', on the site of what is now the Misses Daniels' home" (Hopkins 1976:13). She describes the village of Minervaville as being between Cedar and Cabin creeks and containing "a few stores and shops." After the school was eventually abandoned, Hopkins reports the various small tracts were acquired by John Hopkins. Later the site was used as the slave

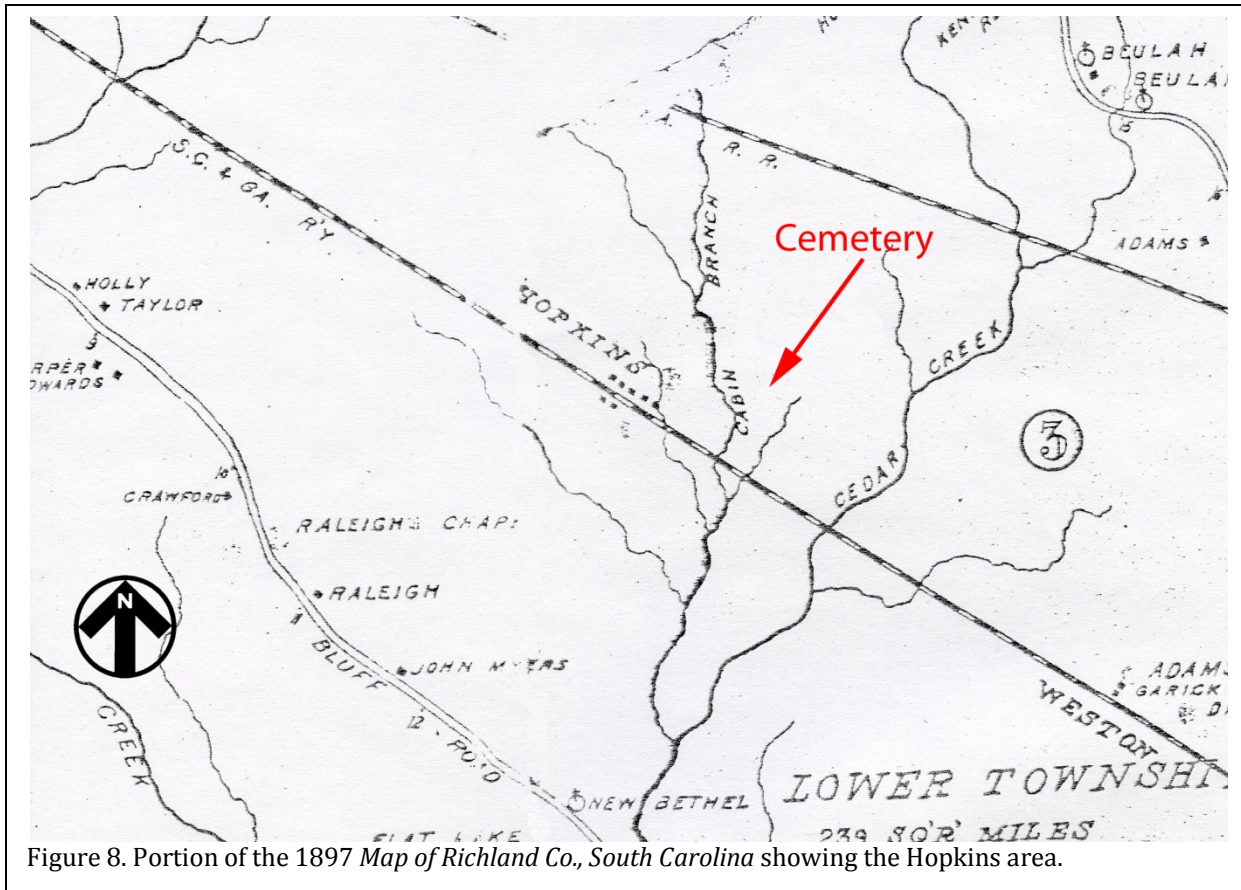
settlement by David Thomas Hopkins' (1802-1836) widow, Fannie, and eventually the property became known as "Fannie Hopkins" (Hopkins 1976:13, 19). When Fannie died in 1866 at least a portion of the plantation was acquired by James P. Adams (Hopkins 1976:19).

Moore provides a little more detail, explaining that a year prior to their incorporation the Minerva Society asked the General Assembly for permission to use the recently abandoned Horrell Hill courthouse as a grammar school for the children of the "poorer class of men." It was "some years later" that the school house referenced by Green was apparently built (Moore 1993:39). It is odd that Hopkins (1976:13) reports that "many of the Hopkins, Adams, Tuckers and Westons" – among the wealthiest planters of the region – attended this school since it was intended for the "poorer classes." In fact, Moore suggests that the Richland County planter elite did not support such schools since,

Education was expensive and could increase taxes. Also it might well spread to blacks, and any center of activity in a rural landscape (even a schoolhouse) could attract a storekeeper who sold whiskey (Moore 1993:170).

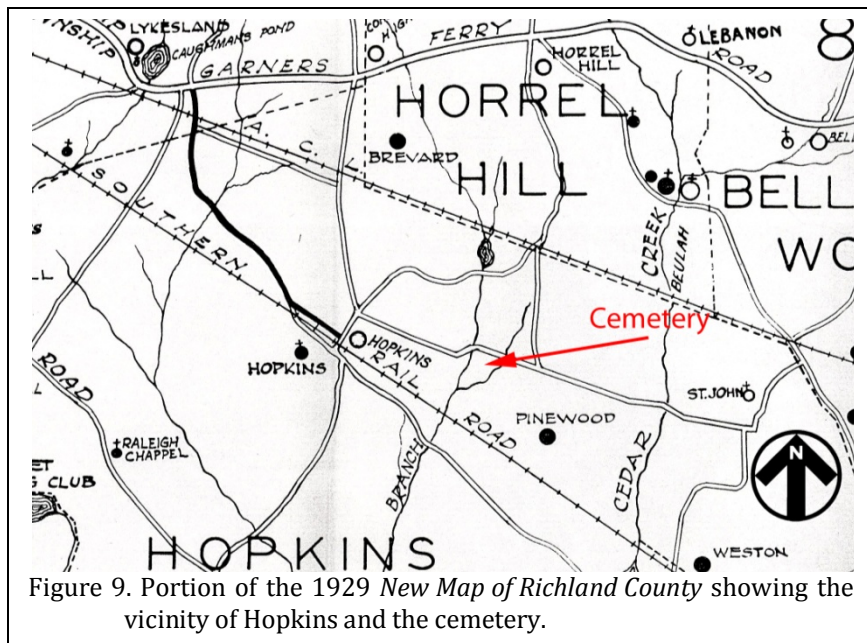
By 1853, when the site was visited by diarist Samuel Leland, he remarked that the location of Minervaville had once been "a considerable little village" with several stores that were "the meeting place for all of the Planters & idlers for miles around" (quoted in Moore 1993:170). He explained that the community had been plowed under by the Hopkins family and was then being used to grow peanuts and potatoes. In 1838 a resolution to the General Assembly asked that the polling place at Minervaville be discontinued (SC Department of Archives and History, S165018: Resolutions of the General Assembly, 1838, item 49).

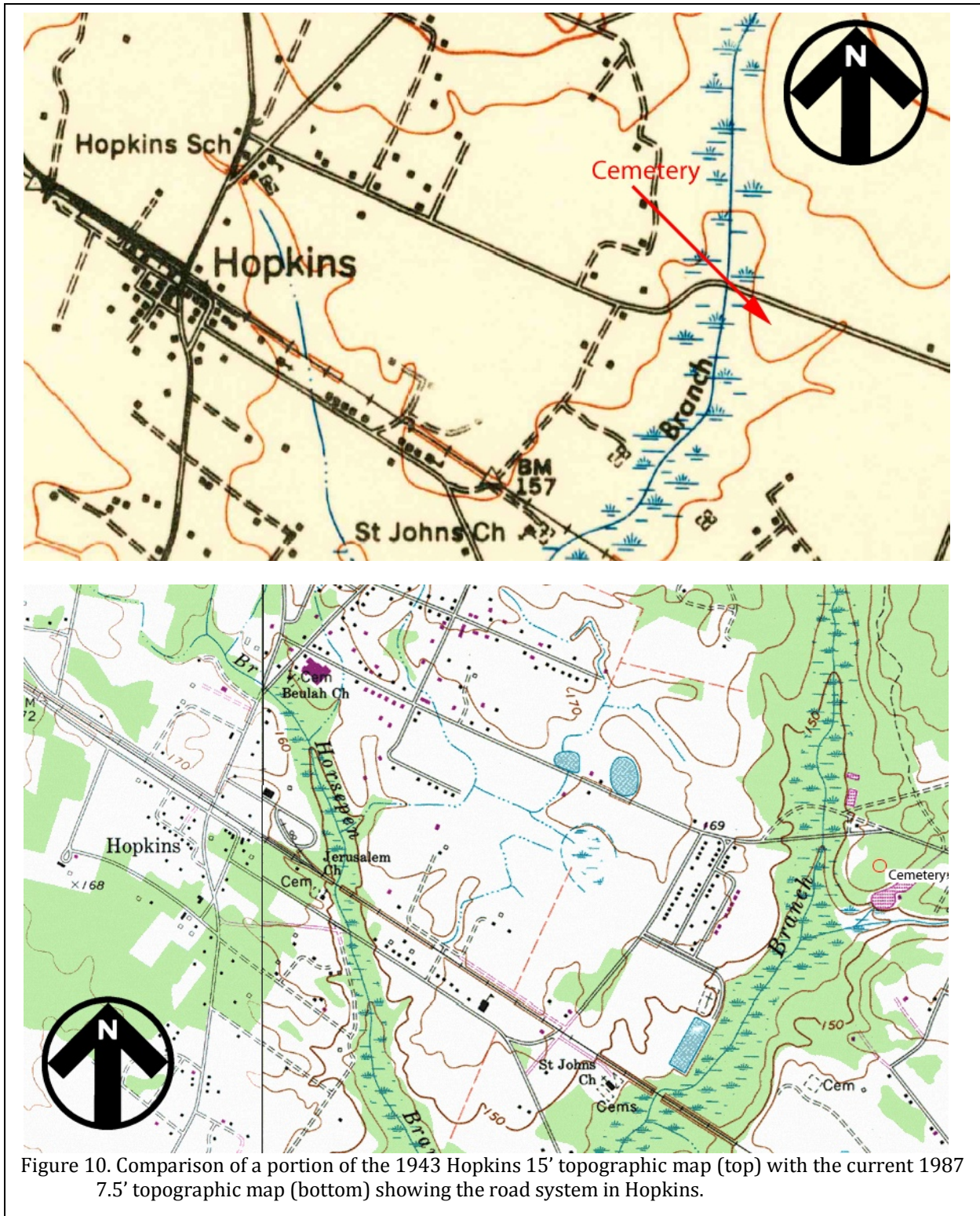
We have not identified another map of the region until after the Civil War. In 1897, the *Map of Richland Co., South Carolina* was prepared. It shows Hopkins on the South Carolina and Georgia



Railway as a cluster of seven structures west of Cabin Branch. Nothing, however, is shown in the vicinity of the cemetery.

An additional map was prepared in 1915, although it, too, fails to show any structures or settlement in the vicinity the cemetery. Cabin Creek Road is shown, as is the Hopkins community. A similar map, *New Map of Richland County*, dates from 1929. The Hopkins community is no longer shown, although a white school (open circle) and African American church (darkened circle with cross) are both shown in the area. The road system at Hopkins is also still as it was close to two





decades earlier. By this time the rail line passing through Hopkins is the Southern Rail Road, while the one to the north is the Atlantic Coast Line.

As late as 1943 Hopkins was still a thriving community that included over 40 structures covering about 146 acres. This is substantially larger than is suggested by oral history from the 1920s (see, for example, Adams and Brooks 2010:93) and reveals both the fallibility of oral history, as well as the importance of combining oral history with documentary history.

When the 1943 map is compared to the 1987 topographic map we can see that while many structures are no longer present, the road system is still largely intact. This means that, coupled with aerial imagery, it would not be difficult to reconstruct the Hopkins of the early twentieth century. Combined with archaeological studies much could be documented about this early community.

There are also aeriels dating from 1939 and 1959 that show the cemetery and the surrounding vegetation (Figure 11). The 1939 aerial shows the cemetery fully vegetated and it is possible to distinguish between the upland mixed pine and hardwood forest and the lowlands that are dominated by hardwoods. Twenty years later, in 1959, the upland area has been logged of pine and the vegetation remaining appears to be

hardwoods. Hardwoods continue to dominate the lowlands around the cemetery.

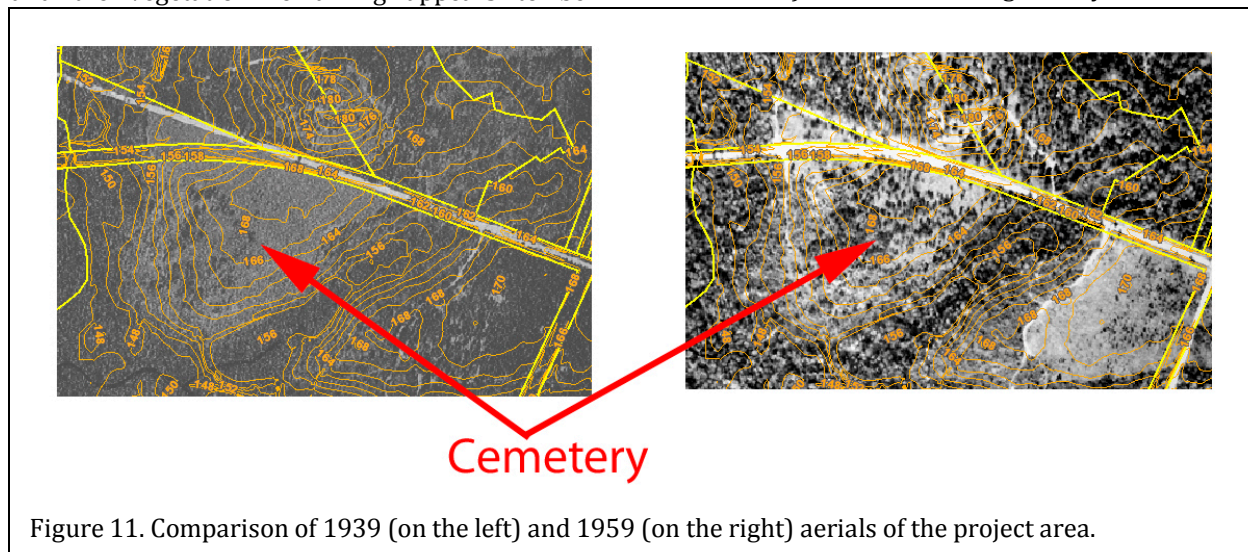
The Cemetery

While it is possible to reconstruct some history of the Hopkins area, as well as reconstruct at least some basic land use history for the cemetery, in the absence of a detailed title search of property ownership, it would be impossible to determine who owned or used the cemetery. Various speculations that it may be associated with the Minerva Academy or any specific plantation would be just that – speculations with no foundation in fact.

Fortunately, during this work, we identified a single stone in the cemetery with an inscription to Mary H. Reese (1810-1858). Curiously, this individual is not included in Hopkins (1976), although a Reese is shown on the 1897 map of Richland County in the Horrell Hill area.

It was possible to identify Mary Howell Reese as the daughter of John Altum Reese and Mary Howell, and the granddaughter of Rev. Joseph B. Rees (in early records, but later, Reese) and Ann Reynolds.

Rev. Joseph Reese was born in 1732 on Duck Creek in Kent County, Pennsylvania (now Delaware), but was in Congaree by 1745. While



brought up an Anglican, he converted to the Baptist faith and was ordained in 1768. For most of his career he was the pastor of Congaree Church. At his death, his property included tracts of land in Congaree, Lawsons Fork pinelands, and Pincushion Swamp, including a plantation and house in the low lands of Congaree, as well as books and slaves (Townsend 1935:145). His will devised his tract of land on Cedar Creek to John Altum Reese (SC Department of Archives and History, S108093: South Carolina Will Transcripts, Richland County, Will Book C, pg. 107).

By at least 1810, the federal census lists John A. Reese living in Richland County with his family of seven and 16 enslaved African Americans. A decade later in 1820 Reese's slaves had increased to 28, while his family consisted of him, his wife, and four children. Sixteen of these slaves were engaged in agriculture while one was listed as engaged in some sort of manufacturing enterprise. We know that the family consisted of Gracie E. Reese (1799-), Arthur H. Reese (1800-), Joseph E. Reese (1802-1876), Mary Howell Reese (1810-1858), and Martha Sarah Reese (1819-1863).

In 1840 John A. Reese had acquired 65 slaves, with 31 engaged in agriculture. His family included his wife and two older daughters, probably Mary H. Reese and Martha Sarah Reese.

John A. Reese died in December 1843. His will specified that this wife, Mary Reese, would have a life estate of his plantation and "my present place of residence," household and kitchen furniture, as well as the "stock of horses, mules, cattle, hogs, wagons and carriage of every description, my crop of provisions and all my plantation and household utensils of every description." He also devised to her, again as a life interest, one-sixth of all his slaves. At her death these properties would be divided among his children (SC Department of Archives and History, S108093: South Carolina Will Transcripts, Richland County, Will Book L, pg. 41).

The other heirs included Mary Howell Reese, Martha Reese, Gracie Reese Brown, Joseph E. Reese, Arthur H. Reese, and a granddaughter,

Emma G. Reese. Slaves specifically devised to Mary H. Reese included Hull, Venus, Nick, Fanny, and Isabella.

The 1850 census reveals that Mary (42 years old) and Emma (16 years old) were both still living with their mother (now 73 years old) on the family plantation. Emma was attending school, but the census provides no value for the real estate. The slave schedules reveal that Mary reported 21 slaves in her name, while her daughter, Mary H., reported an additional 20 slaves.

The 1850 agricultural schedule for Mary Reese reveals that the plantation encompassed a rather modest 460 acres, valued at \$1,000 (\$25,900 in 2010\$). Only 60 acres, however, were improved, suggesting the rest were in woods. The schedule reports livestock including two horses, three milch cows, and 27 cattle, with a value of \$595 (\$15,400 in 2010\$). The schedule, however, reports no other activity on the plantation.

There were a substantial number of mouths to feed on the plantation – three whites, 41 enslaved African Americans, and 32 head of livestock. Coupled with 60 acres of improved land, it seems likely that at least subsistence crops were being planted. What is hard to explain is why so many slaves were present on a tract that was doing so little. Of course, it may be that these slaves were generating income by being leased to other planters in the area.

Mary Reese died in 1850 and her daughter, Mary H. Reese, died by 1858. So we have been unable to identify the tract in the 1860 census.

The will of Mary Howell Reese, however, provides important information concerning the cemetery (SC Department of Archives and History, S108093: South Carolina Will Transcripts, Richland County, Will Book L, pg. 424). She instructs her executors to pay her debts and then "the balance, if there should be any shall be applied to the purchasing of plain marble tombs, with suitable inscriptions to be erected over the graves of my Father, Mother, Brothers and Sisters,

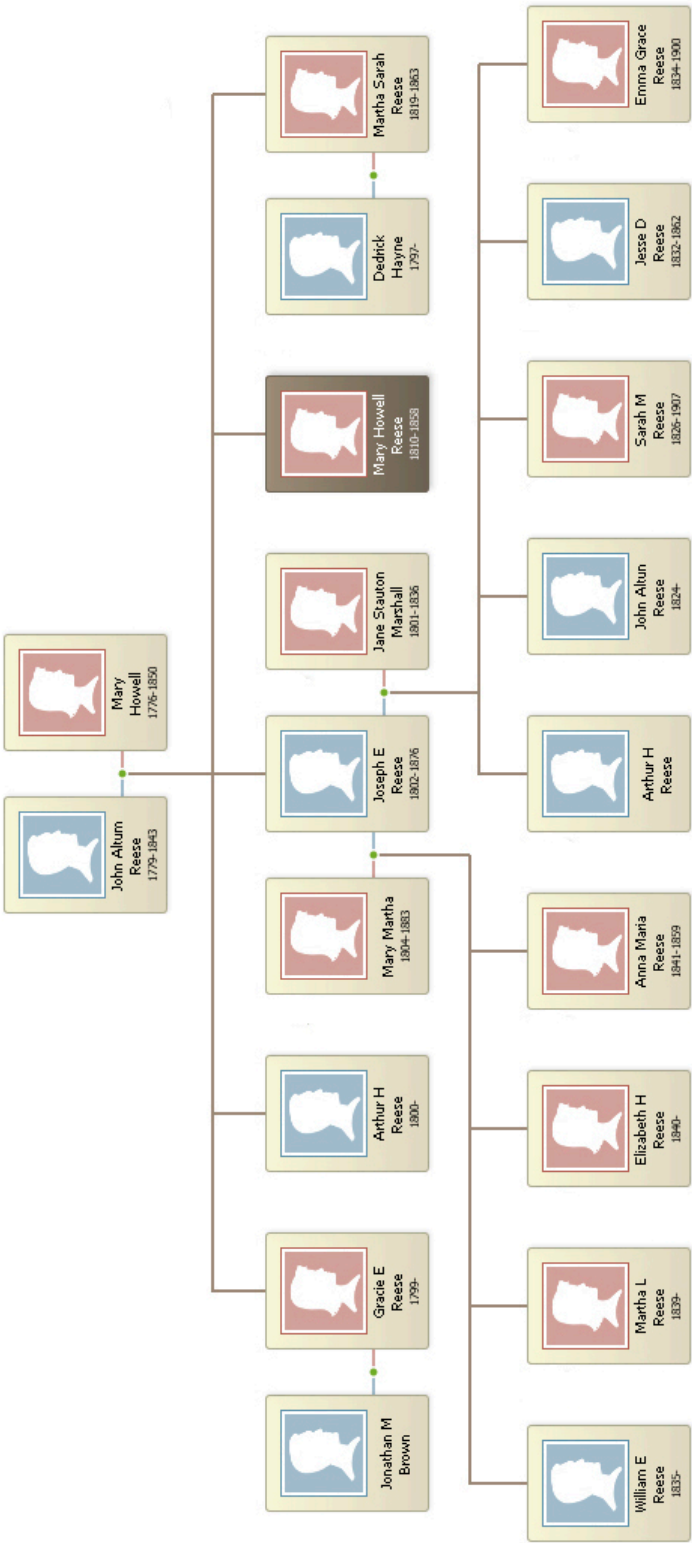


Figure 12. Reese family tree (adopted from Ancestry.com). Mary Howell Reese, whose stone has been identified, is shown darkened.

in our family burying ground.” The lands she devises to her brother, Joseph E. Reese, along with stock and tools. Joseph E. Reese does appear in the 1860 agricultural census reporting 2,800 acres of land valued at \$20,000 and livestock valued at \$2,500. He reports 200 bales of cotton, a respectable amount. It is unclear, however, how much of this property represents his own and how much is that of his sister.

Regardless, Mary H. Reese’s will clearly reveals that she was buried on the family lands, in the family burial ground. It also suggests that while there was money to mark her grave, there was not money sufficient to mark the graves of her parents or siblings – accounting for unmarked burials. It appears that while her brother, Joseph, inherited the land and was a planter of some wealth, he chose not to fulfill his sister’s request to mark the other graves in the family cemetery.

Future Research

There is much that deserves additional attention. For example, it would be useful to examine the title to the property, beginning with the current owner, J. P. Neal (TMS R24500-05-02) who acquired the property in 1978 (Richland County DB D470, pg. 647). Although Richland County records were destroyed during the Civil War, it may be possible to trace the property back to a Reese.

There are also several plats at the SC Department of Archives and History that identify a J.A. Reese in the vicinity of Cabin Branch, including an 1843 plat of 1,183 acres for Frances Hopkins (SC Department of Archives and History, S213192: State Plat Books (Columbia Series), vol. 54, pg. 28) and another dated 1858 for Francis M. Hopkins that includes 2,083 acres on Cabin Branch and Cedar Creek (SC Department of Archives and History, S213192: State Plat Books (Columbia Series), vol. 57, pg. 378).

A number of entries are identified in the SC Department of Archives and History holdings when “Cabin Branch” is searched. There are at least eight entries under Minervaville and eight under Minerva Society.

Additional research should particularly seek to begin piecing together the plantation tracts in this vicinity in order to better understand land ownership and use in lower Richland County. It is critical that research begin to move beyond genealogical research and oral history.

Preservation Assessment

Road and Access Issues

Access to the cemetery is by way of Cabin Creek Road, S-66, a rather minor secondary road that runs from Lower Richland Road (S-37) eventually connecting with Airbase Road (SC 769). The road consists of two 12-foot travel lanes with narrow shoulders that provide little recovery area. A ditch occurs on the south side of the road. The entrance to the cemetery property occurs between Acie and Neal roads and between two curves. This can present a hazard, especially to those not familiar with the location. The entrance is a 10-foot wide single lane gravel drive. Within 30 feet of the road turn-off there is a locked gate; this provides room for only one or two cars to pull off and unlock the gate.

The access road is adequately maintained, although gravel roads do require considerable long-term maintenance. The cemetery is not, however, generally known and we anticipate very light use of the road for cemetery access.

The rural location largely precludes pedestrian access, although the cemetery could be reached by walking through the woods from Cabin Creek Road. There is, however, no convenient parking on the road, so this may not become a significant issue.

Since Cabin Creek Preserve, on which the cemetery is located, is intended to provide science and history education, visitation may increase. To assist in this a trail has been designed that leads from the access road to the cemetery. This pedestrian trail is soil or mulch, about 8 feet in width.

There is no specific entry into the cemetery, which is surrounded by a low dike and ditch. We observed that even during this limited

work to map the cemetery it was easy to quickly wear a pathway across these features. Thus, any significant visitation will begin to increase considerable erosion of the surrounding feature.

There is an existing level “entrance” or opening into the cemetery on the east side. The caregivers should strive to funnel visitors into the cemetery using this existing open space in order to minimize damage to the surrounding feature. One way to accomplish this is to locate signage concerning the cemetery at this natural entrance, thereby encouraging visitors to that point.

We also recommend that signage be placed in several places on the dike asking that visitors not climb or cross except at the eastern entrance.

There are some limiting factors for ADA compliance or universal access at the cemetery. The modifications necessary to achieve such access would include hard surfaced pathways. Such pathways have a base cost of about \$65-\$85 per lineal foot. They tend to be rather harsh in a historic cemetery setting, where a mulch pathway would not only be less expensive (about \$25/lineal foot), but would also result in a reduced visual impact to the cemetery and its setting. At the present level of use we are not convinced that there is a demand adequate to justify either the expense or the damage to the historic fabric.

In addition, the ADA or the Rehabilitation Act of 1973 is generally not interpreted to apply to cemeteries by the Department of Justice. Nevertheless, we are an aging population and it would be appropriate for the caregivers to in some manner help make the cemetery accessible. For example, after additional historic research, it may be appropriate to place a historic marker

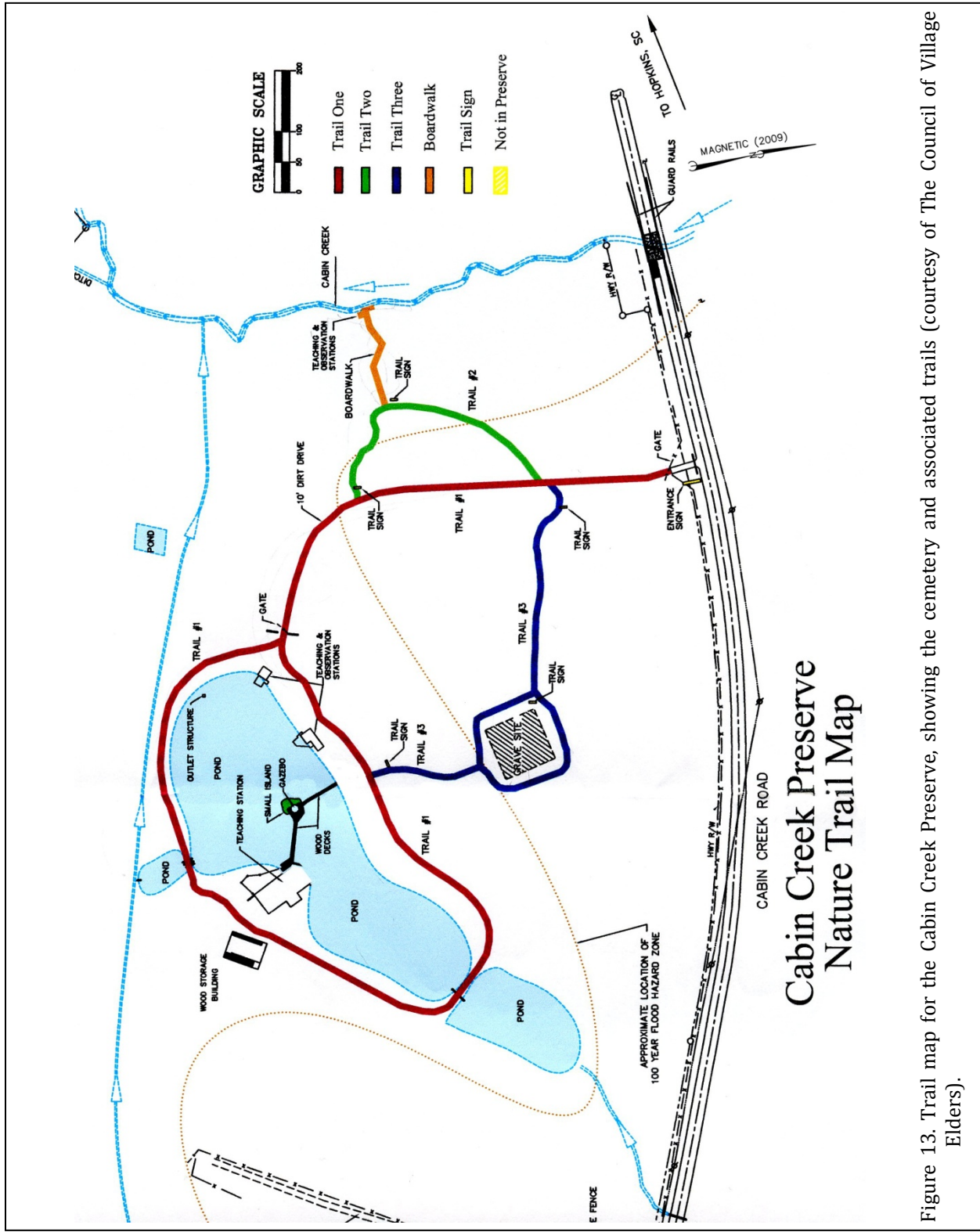


Figure 13. Trail map for the Cabin Creek Preserve, showing the cemetery and associated trails (courtesy of The Council of Village Elders).

along Cabin Creek Road, allowing visitors to learn about the cemetery without leaving their automobiles.

Security Issues

We understand that there have been no incidents of vandalism within the recent past, but there is also no mechanism in place to track vandalism. Currently the property is rural, the woods are relatively dense, and little is known about the property or what is on it. As the Hopkins area become less rural and more developments are built, the potential for vandalism of the cemetery increases. There is also no protective fence that might help dissuade inappropriate visitation.

At a minimum, posting of the property may be appropriate and we recommend that the caregivers consult with their attorney to determine the level of signage needed to allow the Richland County Sheriff's Department to arrest those trespassing on the property.

We also recommend that, at a minimum, a fence be erected along the Cabin Creek Road frontage to deter access from the road through the woods. An appropriate choice would be a commercial grade fence using heavy line posts (typically 2 or 2½ inch O.D. SS40), heavy top rail posts (1 5/8" SS40), heavy gauge wire (6-9 gauge), 1-2 inch mesh size, Class 2 hot-dipped galvanized protection top coated with plastic, and cast iron fittings rather than aluminum. While such a fence is more costly than a residential grade fence, it will last substantially longer and require much less maintenance.

We do not know if any of the buildings in the preserve are lighted at night, but the cemetery is sufficiently isolated that it is unlikely to offer any protection. In addition, lighting is only useful if there are people present to use this lighting to identify intruders. In an isolated location such as this, lighting serves no real function.

In rural, forested areas, there is always a danger of forest fires. These can cause damage to cemeteries in a number of different ways. Fire can

damage stones, causing spalling and cracking, as well as smudging the stones. Trees that fall – whether the result of fire or not – can certainly cause damage. In addition, efforts to control the fire, such as use of bulldozers and plowing fire lines can inadvertently cause damage.

Caregivers should contact the South Carolina Forestry Commission, which has the responsibility of protecting state and privately owned forest land from wildfires. For a minimal charge the Commission will construct fire breaks on the property and prior contact will allow caregivers to alert the Commission to the presence of the cemetery. Caregivers should also determine what additional steps may be taken to minimize the risk of fire to the cemetery.

One step we recommend is to establish a firebreak around the cemetery. This may be a plowed or disked strip 20 feet in width around the cemetery. All fuel, including standing trees should be removed. The firebreak can be planted in grasses and clovers so it can provide key food and cover to wildlife.

Landscape Maintenance

Cemetery Trees

Rural cemeteries do not often have a planned landscape. In many cases these burial grounds had little vegetation during the period of their use, with trees and herbaceous plants becoming common only as part of the natural succession of plants as the burial ground lapsed into disuse. In such circumstances the trees that are eventually present are those that are found naturally in the area. This seems to be the case with the cemetery on the Cabin Creek Preserve where pines and oaks dominate with occasional dogwood and holly.

The previously examined aerials suggest that pines have been logged in the past, probably leaving pines untouched on the cemetery. It seems unlikely that once the cemetery ceased being used anyone would have taken the effort to beautify the property. In addition, the trees fail to exhibit any defined pattern.

We do not recommend removing all of the trees in the cemetery, even if that may be historically appropriate. The trees that are present soften the landscape, provide shade to the burial ground, and give it a more attractive and welcoming appearance. Therefore, we strongly discourage the removal of trees except for specific needs (discussed below).

Moreover, when trees are removed, they should be replaced in order to maintain the overall cemetery appearance and ambience. Cemeteries, in general, have historically been dominated by large deciduous trees, although evergreens such as cedar are also very common. They provide a distinctly inviting image for visitors and passersby.

There is no such thing as the perfect tree – all trees have both strengths and weaknesses. Ideally, replacement trees should maintain the overall appearance of the cemetery while not adding to maintenance issues and further taxing the available volunteers.

Some suitable trees include the sugar maple, white oak, and cedar.

The sugar maple (*Acer saccharum*) has a variety of good qualities including its resistance to breakage and absence of surface roots. It provides excellent colors through all seasons and is frequently used for ornamental plantings. It is moderately drought resistant and can tolerate partial shade. The tree grows 50 to 80 feet in height and has a spread of 35 to 80 feet.

The white oak (*Quercus alba*) is also resistant to breakage and surface roots are not a problem. It is a northern oak and the Piedmont is at the edge of its region. It is moderately resistant to drought, but it does produce considerable litter. The tree ranges from 60 to 100 feet in height and spreads from 60 to 80 feet, so it does require considerable space.

The Eastern red cedar (*Juniperus virginiana*) is a very common cemetery tree and we are surprised that none were observed at the cemetery. Surface roots are not a problem and

while the limbs are prone to breakage the tree form reduces the threat to stones. The tree is highly resistant to drought, a major consideration for the cemetery location. The cedar can grow to heights of 40-50 feet and has a spread of 10-20 feet, making it a more compact choice.

It is unlikely that the caregivers for the cemetery will be able to routinely water newly planted trees. While relying on rainfall after initial planting is typically acceptable, the recent summer droughts make it imperative that water is provided over the first year. A good choice is the use of water rings or bladders for the newly planted trees. These typically store about 20 gallons of water, gradually releasing it over 48 hours or longer. These bladders are relatively inexpensive and should be provided to all new trees.

All replacement trees should be of at least 1-inch caliper and meet the minimum requirements of the American Nursery and Landscape Association's American Standard for Nursery Stock (ANSI Z60.1-2004).

We initially recommended that all herbaceous vegetation be removed, as well as trees under 2-inches dbh (diameter breast height). By the time of the assessment this had been largely completed, although there remain some smaller trees and undergrowth that should be removed as soon as possible.

There are also a number of trees that are dead, topped, or diseased that should be removed, regardless of their size. During the assessment all of these were marked with fluorescent orange banding so they will be readily identifiable.

These marked trees should be removed as soon as possible. Smaller branches should be chipped, with the resulting mulch added to the cemetery to reduce future herbaceous growth. The tree itself should be cut into manageable lengths and disposed of in the surrounding forest to decompose naturally, or if possible, mulched.

Trees that are removed should not be stacked near the cemetery. This practice promotes



Figure 14. Tree issues in the cemetery. Upper left photo shows a dead pine. Upper right photo shows a badly leaning oak. Lower left photo shows a variety of small trees that need to be removed. Lower right photo illustrates that it is critical to always “look up” in order to see tree problems – such as this dead pine.

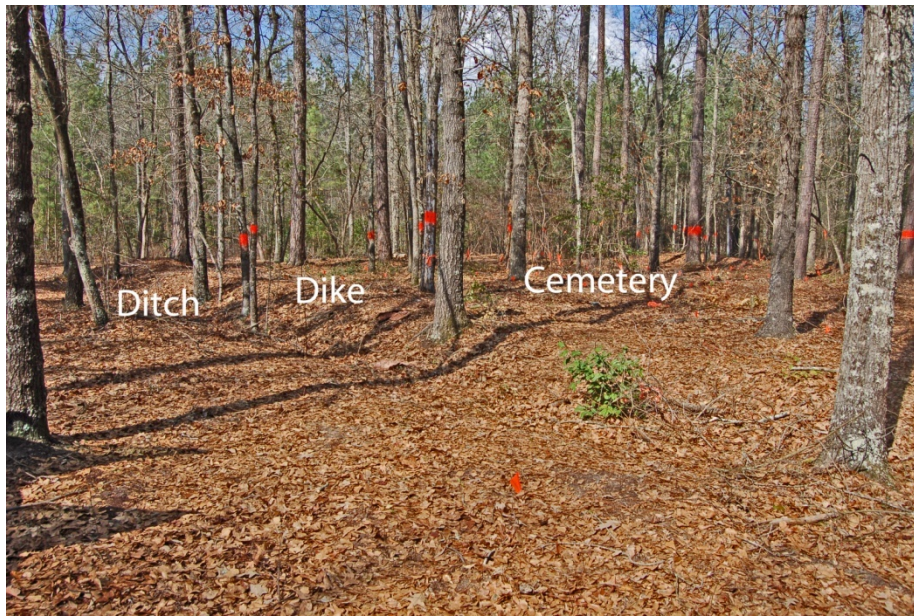


Figure 15. View of the ditch and dike that surround the cemetery.

the occurrence of rodents which in turn will attract snakes. In addition, these trash piles are unattractive and detract from the cemetery setting. We strongly recommend that the existing trash piles be removed.

Trees should be inspected for potential threats to monuments, as well as general health.

Ideally these inspections should be made yearly and after any storm where the winds exceed 55 mph. They should be pruned to remove potentially hazardous dead wood on a yearly basis, but safe pruning every 5 years by a certified arborist is acceptable. Under no circumstances are tree climbers (hooks, spikes, gaffs) to be worn while ascending, descending, or working in trees to be pruned.

For those trees where removal is deemed necessary, the trunk should be cut as close to the ground as possible, leaving the stump in place to decay naturally. No chemical additives should be used to hasten decay, although it is acceptable to paint an herbicide on the stump if it is a tree that will promote suckers. Stump grinders should never be used in the cemetery since they have the potential to cause damage to stones and graves.

Ground Cover

Over time and with the opening of the overstory, there will be a tendency for the cemetery to attract a dense understory. Efforts will be required to keep this growth in check. One

of the most effective means is to establish a dense mulch layer

We recommend applying about 4-inches across the site and this would require about 110 cubic yards of mulch. This represents a large quantity, however the City of Columbia composting facility may provide mulch from their landfill to the public. Another source of mulch may be from local tree companies that would be required to take their mulch from tree removals to the landfill. It may be less expensive for them to deliver the mulch to the cemetery.

The cemetery should also plan on mulching as much material on-site as possible. This would include those trees recommended for removal and the branches and other debris that have accumulated in the cemetery.

It will be important not to mulch over downed stones – these will need to be picked up, mulch laid down, and the stone then reset. Buried footstones should also be reset so they don't disappear into the mulch.

Other Maintenance

Signage

The cemetery lacks effective signage. During our assessment the only signage we observed was a sign at the entrance of the property and it does not mention the cemetery. We understand that there will be a trail sign for the cemetery and we presume it is awaiting the recommendations of this assessment.

From a cemetery preservation perspective, signage is of four basic types: identification, regulatory, informational, and interpretative. They are generally recommended in this same priority.

Identification signage might include the name of the cemetery and might also include the cemetery's date of founding and historic significance (i.e., eligible for listing on the National Register). This signage should receive a high priority.

Regulatory signage specifies laws, regulations, or expected standards of behavior. We recommend that the caregivers develop signage dealing with, minimally, these issues (perhaps with some modifications of language as might be needed):

- The cemetery is open from 8am to 5pm. Any individual in the cemetery at other times is subject to arrest for trespass.
- Absolutely no gravestone rubbings will be allowed.
- The stones in this cemetery are fragile. Please refrain from leaning, sitting, or climbing on any monument. All children must be escorted by an adult.
- Absolutely no alcoholic beverages, fireworks, or fire arms are allowed in the cemetery. Proper conduct is expected at all times.
- No pets are allowed in the cemetery.
- No plantings are allowed within the cemetery.
- For additional information concerning maintenance issues, please contact _____ at _____. In case of emergency contact _____.

This regulatory information could be incorporated with the trail signage.

The last two types of signage are informational (for example, directional signs) and interpretative (information on historic people buried in the cemetery).

The cemetery is so small that informational signage is not necessary. The isolated location and low visitation suggests that interpretative signage is not needed at this time.

It is important, however, to understand that seeking additional visitation will increase both short-term and long-term maintenance

issues. As visitation increases, so too does wear and tear on the historic fabric – the creation of foot paths, possible additional damage to the few stones present, inappropriate activities at the cemetery, and more litter.

Trash

During the assessment the cemetery was examined for evidence of trash. The cemetery was found to be very clean. This is almost certainly the result of both low visitation and the efforts of the caregivers.

At the present time we do not recommend any trash containers – they would only represent an additional maintenance demand. The caregivers should be aware, however, that additional visitation will almost certainly increase the level of trash and additional steps may be necessary in the future.

We did observe abundant piles of construction materials and other items on the road and path to the cemetery. An effort should be made to remove all of this material or, minimally, remove it to storage in a location that does not visually impact the cemetery.

Conservation

What is Conservation?

Conservation is *not* restoration. Restoration means, very simply, making something “like new.” Restoration implies dramatic changes of the historic fabric, including the elimination of fabric that does not “fit” the current “restoration plan.” Restoration is inherently destructive of patina and what makes a property historic in the first place. The “restorer” of a property will know nothing of the Secretary of the Interior’s Standards for Preservation and care even less.

One of the most important early writings was that of nineteenth century art critic and observer John Ruskin. In *The Seven Lamps of Architecture* published in 1849 and in particular, “The Lamp of Memory,” Ruskin introduces us to

the issue of trusteeship where he explains,

it is again no question of expediency or feeling whether we shall preserve the buildings of past times or not. We have no right whatever to touch them. They are not ours. They belong partly to those who built them, and partly to all the generations of mankind who are to follow us.

Ruskin also explained the difference between restoration and repair, noting that “restoration” means,

the most total destruction which a building can suffer: a destruction out of which no remnants can be gathered: a destruction accompanied with false description of the thing destroyed.

In contrast, conservation can be defined as preservation from loss, depletion, waste, or harm. Conservation seeks to limit natural deterioration. Conservation will respect the historic materials, examine the variety of options available, and select those that pose the least potential threat to the property. Conservation will ensure complete documentation, whether it is of cleaning, painting, or repair. Conservation will ensure that the work done today does not affect our ability to treat the object tomorrow.

Stone Damage

With only one stone identified in this cemetery the damage is limited. It is, however, critical that appropriate conservation treatment be given a high priority since stones on the ground are subject to additional damage, increasing the eventual cost of appropriate repair.

In virtually every case gravestones are fragile and their repair is delicate work. There are many products on the market, used by commercial stone companies, that are inappropriate for (and often damaging to) historic stone.



Figure 16. Broken stone for Mary H. Reese that requires conservation treatment.

Appropriate conservation treatment for this stone will involve drilling and pinning, carefully aligning the two fragments. Fiberglass pins and epoxy adhesives formulated for the specific stone are used in this type of repair. Diameters and lengths of pins vary with the individual application, depending on the nature of the break, the thickness of the stone, its condition, and its expected post-repair treatment.

Such work should only be performed by trained conservators with experience in stone repair. If desired, Chicora can provide the caregivers with a treatment proposal for the

repair of the broken stone at the cemetery.

Recommendations and Priorities

Priorities are identified here as First, Second, or Third:

First priorities are those we recommend undertaking during the current fiscal or calendar year. Some of these high priority items will necessarily extend over several years; however, it is critical that progress be consistent and continual.

Second priorities are those that should be budgeted for over the next 2 to 3 years. They represent urgent issues that, if ignored, will result in both significant and noticeable deterioration of the cemetery as a historic resource.

Third priorities are those that may be postponed for 3 to 5 years. They are issues that can wait for appropriations to build up to allow action. Some are also less significant undertakings or actions that require other stages to be in place in order to make them feasible or likely to be successful. Because they are given this lower priority, however, they should not be dismissed as trivial or unimportant.

First Priority Actions

1.1 All decisions regarding modifications, alterations, additions, or other actions affecting the cemetery should be carefully evaluated against the Secretary of the Interior's Standards for Preservation.

1.2 There remain a very large number of questions

surrounding the cemetery. The current historic research has barely scratched the surface and more detail is necessary not only for long-range planning, but also for possible nomination of the cemetery to the National Register of Historic Places.

1.3 The property should be posted to deter inappropriate visitation.

1.4 Caregivers should contact the South Carolina Forestry Commission about steps, including a fire lane, to protect the cemetery from forest fires.

1.5 Small, diseased, topped, or dead trees should be removed from the cemetery, along with remaining understory herbaceous vegetation. These trees have been marked to facilitate their identification.

1.6 About 4-inches of mulch should be applied to the cemetery.

1.7 All debris piles should be mulched or removed from the immediate cemetery vicinity.

1.8 Construction materials and other items on the road and path to the cemetery should be removed as soon as possible.

1.9 The one broken stone should be repaired by an AIC conservator and the footstone reset.

Second Priority Actions

2.1 Identification and regulatory signage should be erected at the cemetery. These can be integrated into the trail signage.

2.2 A highway marker should be erected along the road for the cemetery.

2.3 Trees other than those currently marked should not be removed from the cemetery. If it becomes necessary to remove additional trees (e.g., diseased or damaged), they should be replaced using appropriate trees to maintain the overall cemetery appearance and ambience.

2.4 Caregivers should funnel visitors to use the

eastern flat area to enter the cemetery in order to prevent erosion and damage to the ditch and dike features.

2.5 Small, discreet signage should be erected on the ditch requesting that visitors not climb or cross except at the eastern entrance.

2.6 An ongoing maintenance program should be developed to remove herbaceous vegetation on a yearly basis and to renew the mulch.

Third Priority Actions

3.1 A commercial or industrial grade chain link fence should be erected along the Cabin Creek Road frontage to deter access from the road through the woods to the cemetery.

Grave Identification and Mapping

Methods

Grave Identification

Initially we anticipated using a penetrometer to identify unmarked graves. A penetrometer is a device for measuring the compaction of soil. Soil compaction is well understood in construction, where its primary objective is to achieve a soil density that will carry specified loads without undue settlement and in agronomy, where compaction is recognized as an unfavorable by-product of tillage. Compaction is less well understood in archaeology, although some work has been conducted in exploring the effects of compaction on archaeological materials (see, for example, Ebeid 1992).

In the most general sense, the compaction of soil requires movement and rearrangement of individual soil particles. This movement fits them together and fills the voids that may be present, especially in fill materials. For the necessary movement to occur, friction must be reduced, typically by ensuring that the soil has the proper amount of moisture. If too much is present, some will be expelled and in the extreme, the soils become soupy or like quicksand and compaction is not possible. If too little moisture is present, there will not be adequate lubrication of the soil particles and, again, compaction is impossible. For each soil type and condition there is an optimum level to allow compaction.

When natural soil strata are disturbed – whether by large scale construction or by the excavation of a small hole in the ground – the resulting spoil contains a large volume of voids and the compaction of the soil is very low. When this spoil is used as fill, either in the original hole or at another location, it likewise has a large

volume of voids and a very low compaction.

In construction, such fill is artificially compacted, settling under a load as air and water are expelled. For example, compaction by heavy rubber-tired vehicles will produce a change in density or compaction as deep as 4.0 feet. In agriculture, tillage is normally confined to dry weather or the end of the growing season – when the lubricating effects of water are minimized.

In the case of a pit, or a burial, the excavated fill is typically thrown back in the hole not as thin layers that are compacted before the next layer is added, but in one, relatively quick episode. This prevents the fill from being compacted, or at least as compacted as the surrounding soil.

Penetrometers come in a variety of styles, but all measure compaction as a numerical reading, typically as pounds per square inch (psi). The Dickey-john penetrometer consists of a stainless steel rod about 3-feet in length, connected to a T-handle. As the rod is inserted in the soil, the compaction needle rotates within an oil filled (for damping) stainless steel housing, indicating the compaction levels. The rod is also engraved at 3-inch levels, allowing more precise collection of compaction measurements through various soil horizons. Two tips (½-inch and ¾-inch) are provided for different soil types.

Of course, a penetrometer is simply a measuring device. It cannot distinguish soil compacted by natural events from soil artificially compacted. The penetrometer cannot distinguish an artificially excavated pit from a tree throw that has been filled in. Nor can it, per se, distinguish between a hole dug as a hearth and a hole dug as a burial pit. What it does, is convert each of these events to psi readings. It is then up to the operator

to determine through various techniques the cause of the increased or lowered soil compaction.



Figure 17. Sunken graves identified and marked prior to mapping. Note the relatively straight and well-organized row.

Curiously, penetrometers are rarely used by archaeologists in routine studies, although they are used by forensic anthropologists (such as Drs. Dennis Dirkmaat and Steve Nawrocki) and by the Federal Bureau of Investigation (Special Agent Michael Hockrein) in searches for clandestine graves. While a penetrometer may be only marginally better than a probe in the hands of an

exceedingly skilled individual with years of experience, such ideal circumstances are rare.

In addition, a penetrometer provides quantitative readings that are replicable and that allow much more accurate documentation of cemeteries. In fact, our research in both sandy and clayey soils in Virginia, North Carolina, South Carolina, and Georgia suggests very consistent graveyard readings.

Like probing, the penetrometer is used at set intervals along grid lines established perpendicular to the suspected grave orientations. The readings are recorded and used to develop a map of probable grave locations. In addition, it is important to “calibrate” the penetrometer to the specific site where it is being used. Since readings are affected by soil moisture and even to some degree by soil texture, it is important to compare readings taken during a single investigation and ensure that soils are generally similar in composition.

It is also important to compare suspect readings to those from known areas. For example, when searching for graves in a cemetery where both marked and unmarked graves are present, it is usually appropriate to begin by examining known graves to identify the range of compaction present. From work at several graveyards, including the Kings Cemetery (Charleston County, South Carolina) where 28 additional graves were identified, Maple Grove Cemetery (Haywood County, North Carolina) where 319 unmarked graves were identified, and the Walker Family Cemetery (Greenville County, South Carolina) where 78 unmarked graves were identified, we have found that the compaction of graves is typically under 150 psi, usually in the range of 50 to 100 psi, while non-grave areas exhibit

compaction that is almost always over 150 psi, typically 160 to 180 psi (Trinkley and Hacker 1997a, 1997b, 1998).

However, upon visiting the cemetery after brush had been carefully removed by hand, we found that graves were well defined by depressed soil. This is a natural process where vaults are not used, wooden caskets or coffins are common, and graves have not been periodically infilled. As the casket and body decompose the grave collapses or sinks, resulting in a depression. Even the grave of Mary H. Reese, documented to 1858, was clearly evident.

In spite of at least one late antebellum grave being clearly evident, we used a penetrometer selectively. We found that the upper 2-feet of soil in the cemetery was generally loose and unconsolidated, yielding readings of less than 100 psi. It wasn't until a depth of nearly 3 feet that graves and non-graves became clearly identifiable. This is not a common situation and we cannot explain the soil conditions. Regardless, the penetrometer study did not identify any additional graves beyond those clearly visible.

Graves were identified by placing surveyor pin flags at the head and foot and joining them using orange survey paint. As graves were mapped, the grave number was added to the flag at the head (west end) of the grave.

Mapping

Mapping was conducted using a Sokkia 530R3 Total Station. This instrument ensures a very high level of precision. Each grave was mapped using the head and foot of the grave, the ditch and dike were both mapped using the centerlines of the features. Pathways were noted, as was the surrounding woods line. Trees in the cemetery were also included on the plan.

Results

As a result of this work it was possible to identify 20 graves in the cemetery. The one marked grave consists of a marble tablet reading, "In memory of / MARY H. REESE /who was born /

May 31st 1810 / died / April 14th 1858." There is an accompanying marble footstone, but it appears unmarked. The footstone is in place at Grave 3, the headstone is out of the ground, lying just to the north of Grave 3.

The bulk of the graves are found in the central portion of the enclosed area, oriented roughly west-northwest by south-southeast. They appear to represent three partial rows. While the organization is loose and the rows are not uniform, this arrangement is typical of a burial ground that receives minimal maintenance and in which few of the graves are marked. Users tend to err on the side of caution when burying if they aren't certain where the last grave was located. This arrangement suggests that the burial ground was used only intermittently and may continue to have been used after the land was sold.

The use of a ditch and dike is seen at several low country plantations, including the Vanderhorst cemetery in Charleston County and the Ulmer cemetery at Rose Hill Plantation in Beaufort County (Adams et al. 1995). The Rose Hill example reveals a similar opening (on the south side) where the ditch and dike simply merge together. It is also relatively open, with only eight burials in an area measuring about 35 feet square.

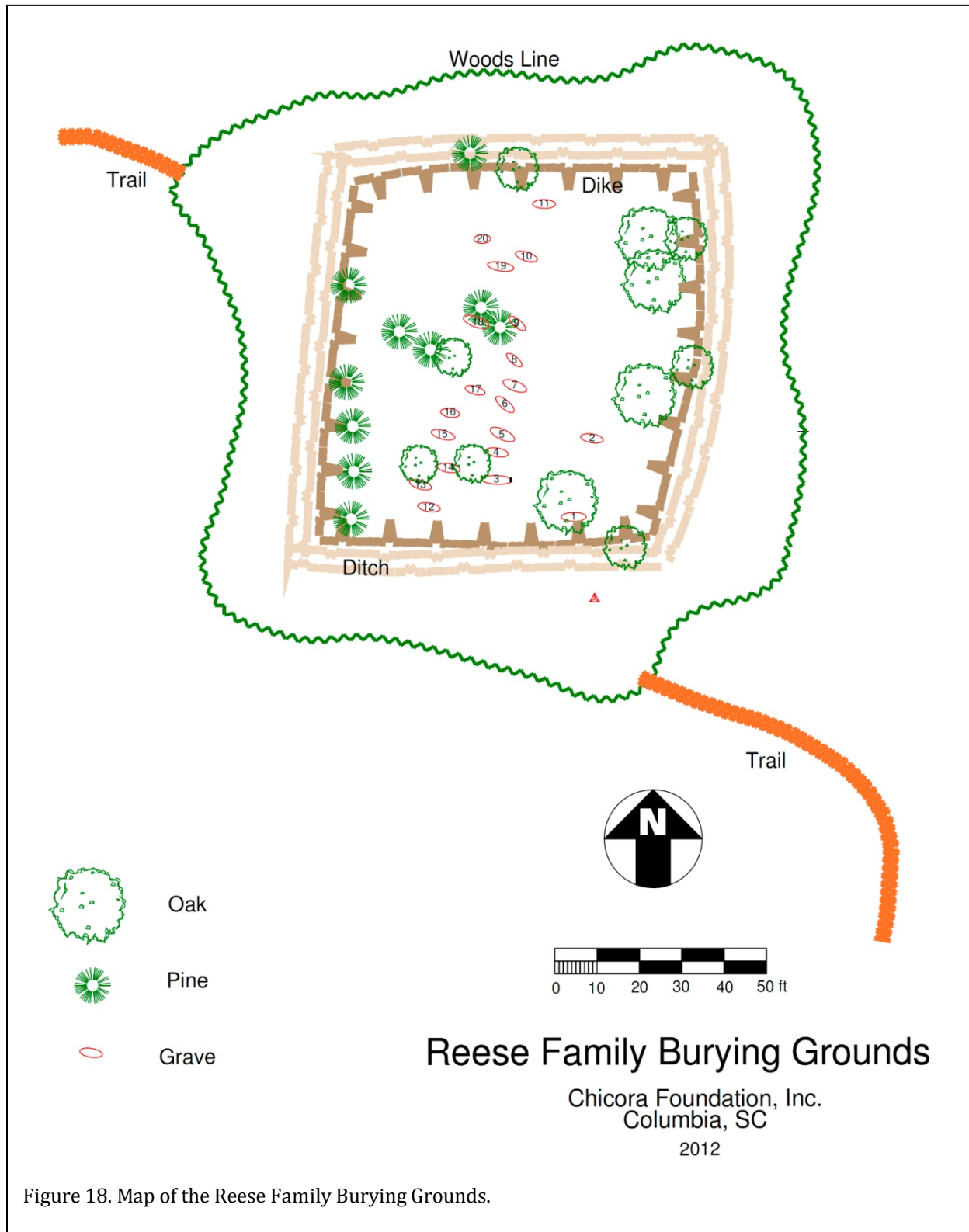


Figure 18. Map of the Reese Family Burying Grounds.

Conclusions

History

While awaiting more detailed historic research, the information currently available indicates that the cemetery on the Cabin Creek Preserve is the Reese Family Burying Ground and that it was likely begun by at least 1843 with the death of John A. Reese. Those buried in the cemetery include Mary H. Reese (d. 1858), John A. Reese (d. 1843), and Mary Reese (d. 1850). Others buried here are not known at present since it appears there was little money to purchase grave markers.

The Reese family was of middling status prior to the Civil War and relatively little is known about their lives. Even less is known about their postbellum activities, but their status may have declined. By the early twentieth century it appears at least some members of the family may have been using nearby Beulah Baptist Church, suggesting that the family burial grounds may have been abandoned.

Additional research is needed, including a title search for the property, an examination of associated plats, and an effort to contact Reese family members who may be able to shed additional light on the cemetery.

Although we have identified compelling evidence that the cemetery is not associated with Minerva Academy, clearly this is another topic that deserves historic research. We have mentioned a variety of tantalizing clues about the school's location – but additional research coupled with archaeological investigation are necessary to move this topic forward. Similarly, although the community of Minervaville has periodically caught the attention of local residents, there has never been any professional research sufficient to identify the location of this community. Nor has

there been any archaeological research to determine if sufficient remains exist to warrant more detailed work. Finally, even the historic community of Hopkins has been largely ignored by researchers. Maps show a thriving community covering over 140 acres present as late as the early 1940s. While almost none of these structures remain, the road system is nearly intact, allowing archaeological research.

The Cemetery

The cemetery consists of a single marked grave and 19 additional unmarked graves. These graves form three loosely defined rows roughly oriented east-west and occupying the central portion of the cemetery. Vegetation is all less than 100 years old, suggesting that the property may have been maintained until sometime in the early 20th century. Certainly by mid-century the cemetery and surrounding area were being logged of pine.

The most intriguing aspect of the cemetery is that it is surrounded by a ditch and bank. The cemetery measures about 75 feet square, although when the ditch and bank are added, the total area expands to about 100 feet north-south by 90 feet east-west. The bank is about 8 feet in width and about 2 feet in height today. The outer ditch is about 4-5 feet in width and about 1-1.5 feet in depth. There is evidence of much erosion, so the bank has been reduced in size and the ditch has been infilled over time. The mapping also reveals that the feature is relatively square and well laid out.

This ditch and bank is similar to plantation cemeteries elsewhere in South Carolina, including the Vanderhorst cemetery in Christ Church Parish (Charleston County) and the Ulmer cemetery in Prince William's Parish (Beaufort County). We have previously suggested

that these enclosures may have been used to lower the water table, providing drier soil for burials. An alternative is that with some sort of palling at the entrance that were used to keep livestock out of the cemetery. Additional historic research may identify a plantation account of such a feature that would help explain its construction.

Preservation Assessment

This study also examined issues of road and pedestrian access, security, maintenance of the landscape, other maintenance issues such as signage, and conservation needs. We provided priorities for preservation activities at the cemetery.

The most critical elements of the long-range preservation plan include conducting additional historic research, completing landscape improvements, and the repair of the one broken stone. All of these are identified as first priority activities, recommended for action during the current year. We have previously briefly commented on the need for historic research. The landscape activities include the removal of small scrub trees, as well as the removal of diseased or dead trees. We also recommend that the vegetation be mulched to help minimize the growth understory vegetation. The mulching will help reduce long-term maintenance costs.

Items that are identified as second priority concerns include appropriate signage for the cemetery, development of a maintenance plan to assure that the cemetery is kept clear of vegetation, and the erection of a highway marker for the cemetery. We have also suggested that it may be possible to identify Reese family that would be interested in marking the sunken graves identified during this study. Small flush-to-the-ground markers would help commemorate those unknown individuals buried at the cemetery and ensure their graves are not lost in the future.

The only item we recommend as a third priority is the erection of a fence along Cabin Creek Road to reduce access to the cemetery. While vandalism is not currently an issue, it

remains a concern. Caregivers must remain vigilant to the possibility of relic hunters plundering graves.

National Register Eligibility

Although additional historic research is needed, it is our professional opinion that the Reese Family Cemetery is eligible for inclusion on the National Register of Historic Places at the local level of significance under Criterion C (distinctive characteristics) and Criterion D (research potential).

After 30 years of cemetery research in South Carolina we have identified only two other cemeteries surrounded by a ditch and bank feature. This is a distinctive construction feature that places this cemetery in a very small assemblage.

We also believe that the cemetery is a good representation of a burial ground used by a middling status white family. While historians, archaeologists, and cemeterians have devoted much time and effort to the documentation of those cemeteries associated with the very wealthy, far less attention has been devoted to those cemeteries used by lower or middling status planters. The assumption, we believe, has been that such individuals were buried in small churchyard plots. The Reese Family Burying Ground represents a class of cemetery about which little is known.

The cemetery is also recommended eligible since there is a good potential for the recovery of archaeological remains should excavations be undertaken. Research at a Lexington County cemetery reveals good preservation of wood and metal in graves of this age. Bone preservation is more variable, but can survive.

Sources

- Adams, Marie Barber and Deborah Scott Brooks
2010 *Images of America: African Americans of Lower Richland County*. Arcadia, Charleston, South Carolina.
- Adams, Natalie, Michael Trinkley, and Debi Hacker
1995 *Archaeological Examination of Nineteenth Century Rose Hill Plantation, Prince William's Parish, Beaufort County, South Carolina*. Research Contribution 174. Chicora Foundation, Inc., Columbia.
- Central Midlands Council of Governments
2003 *Annual Average Daily Traffic Counts for Richland County, 1998-2002*. Central Midlands Council of Governments, Columbia.
- Ebeid, Zakaria
1992 Laboratory Experiments to Study the Effects of Compaction and Pressure on Artifacts in Archaeological Sites. *Archaeological Sites Protection and Preservation Notebook*, Technical Notes ASPPN II-5. Environmental Impact Research Program, Waterways Experiment Station, Army Corps of Engineers, Vicksburg, Mississippi.
- Green, Edwin L.
1932 *A History of Richland County*. Vol. 1: 1732-1805. R.L. Bryan, Columbia.
- Hopkins, Laura Jervey
1979 *Lower Richland Planters: Hopkins, Adams, Weston and Related Families of South Carolina*. R.L. Bryan, Columbia.
- Mills, Robert
1826 *Statistics of South Carolina*. Hurlbut and Lloyd, Charleston, South Carolina.
- Moore, John Hammond
1993 *Columbia and Richland County: A South Carolina Community, 1740-1990*. University of South Carolina Press, Columbia.
- Townsend, Leah
1935 *South Carolina Baptists, 1670-1805*. Florence Printing Company, Florence, South Carolina.
- Trinkley, Michael and Debi Hacker
1997a *Additional Boundary Research at the Kings Cemetery (38CH1590), Charleston County, South Carolina*. Research Contribution 214. Chicora Foundation, Inc., Columbia.
- 1997b *Grave Inventory and Preservation Recommendations for the Maple Grove United Methodist Church Cemetery, Haywood County, North Carolina*. Research Contribution 230. Chicora Foundation, Inc., Columbia.
- 1998 *Grave Inventory and Preservation Recommendations for the Walker Family Cemetery, Greenville County, South Carolina*. Research Series 248. Chicora Foundation,

SOURCES

Inc., Columbia.

Trinkley, Michael, Debi Hacker, and Nicole Southerland

2011 *Son Cemetery: A Bioanthropological Investigation of a Small Lexington County, South Carolina Burial Ground.* Research Series 73. Chicora Foundation, Inc., Columbia.

Cemetery Preservation Plans

Historical Research

**Identification of Grave Locations
and Mapping**

Condition Assessments

Treatment of Stone and Ironwork



Chicora Foundation, Inc.
PO Box 8664 • 861 Arbutus Drive
Columbia, SC 29202-8664
Tel: 803-787-6910
Fax: 803-787-6910
www.chicora.org